



### United States Department of the Interior



BUREAU OF LAND MANAGEMENT Carson City District Office

Developed jointly with the City of Carson City

## Carson City Urban Interface Plan Amendment

October, 1996

The Bureau of Land Management is responsible for the stewardship of our public lands. It is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people for all time. Management is based upon the principle of multiple use and sustained yield of our nation's resources within a framework of environmental responsibility and scientific technology. These resources include recreation, rangelands, timber, minerals, watershed, fish and wildlife, wilderness, air and scenic, scientific and cultural values.

DENVER, CO 80225

ID 88046145

243 .N3 C 369

### CARSON CITY URBAN INTERFACE PLAN AMENDMENT

### TABLE OF CONTENTS

INTRODUCTION  PURPOSE AND NEED  LOCATION	1 1
PLANNING PROCESS OVERVIEW  CONFORMANCE WITH PUBLIC LAND USE PLANS  RELATIONSHIP TO STATUTES, REGULATIONS OR OTHER PLANS	1 3 4
PROPOSED ACTION AND ALTERNATIVES	4
AFFECTED ENVIRONMENT GENERAL VISUAL RESOURCES NATURAL RESOURCES CULTURAL RESOURCES GEOLOGY AND MINERALS LAND USE SOCIAL ECONOMIC CONDITIONS ENVIRONMENTAL CONSEQUENCES PROPOSED ACTION CONTINUATION OF CURRENT MANAGEMENT ALTERNATIVE	9 9 9 9 11 11 16 17 18 18 18
CONSULTATION AND COORDINATION	28
PREPARERS/REVIEWERS	29
REFERENCES	30
DECISION RECORD/FINDING OF NO SIGNIFICANT IMPACT	31
ADDENIDIY	22

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

### CARSON CITY URBAN INTERFACE PLAN AMENDMENT AND ENVIRONMENTAL ASSESSMENT

### INTRODUCTION

### PURPOSE AND NEED

The purpose of this amendment to the Walker resource management plan (RMP) is to provide for improved management of public lands adjacent to the community of Carson City. The amendment is intended to identify areas where public lands will be retained in ownership by the people of the United States; areas where public lands will be available for acquisition by State or local agencies or the private sector; and how public lands will be managed.

The amendment is needed to protect the long term quality of the human environment in the Carson City urban interface. These public lands are an important natural resource for the people of Carson City.

### LOCATION

The planning area includes 17,892 acres of public land in Carson City, Nevada (Map 1).

### PLANNING PROCESS OVERVIEW

This plan amendment process was conducted jointly with the City of Carson City. It includes the nine basic steps common to all public land planning efforts:

 Planning issues were identified through the public scoping process initiated through a Federal Register notice in June, 1995. This was followed by twelve joint BLM/Carson City planning meetings through July, 1996. The planning issues identified for analysis were:

- a Land Tenure
- Management of lands to be retained in federal ownership for open space.

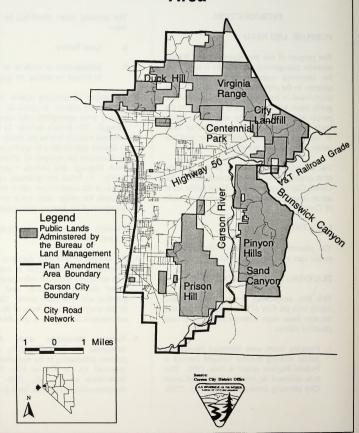
   An analysis of planning criteria concluded
- that existing criteria to guide the planning process were appropriate and need not be changed. The criteria include: 1) Use best available existing data to the extent possible.

  2) Identify opportunities to resolve problems.

  3) Document the analysis of alternatives in plain language and discuss minor issues briefly.

  4) Select the preferred alternative based on the combination which best meets demands for public lands while minimizing disruption of the human environment.
- Resource data necessary to complete the analysis was compiled.
- 4. An analysis of inventory data and resource information was conducted in conjunction with social and economic information, public sector demand for public land, mineral potential and open space needs. The results of this analysis form the basis of the affected environment description in this document.
- 5. Various alternatives were discussed throughout the joint BLM/City planning process, culminating in the recommendations approved by the Carson City Board of Supervisors on July 18, 1996. Those recommendations form the basis for the

### Carson City Urban Interface Plan Amendment Area



proposed action presented in this document. In addition, the analysis includes a Continuation of Current Management Alternative for current management practices.

Alternatives considered but eliminated from detailed study included measures to control locatable mining activity through off road vehicle closures and measures to control leasable mining activity through special stipulations such as no surface occupancy. These alternatives were eliminated from detailed study during the joint development of the plan amendment and Carson City's Master Plan because they would degrade open space resources. Off road vehicle closures would require the filing of plans of operation for all mining activities, but would not prevent surface disturbance from occurring such as trenching, road building, and open pit mining. These activities would degrade open space resources; in some cases, permanently.

Special stipulations for mineral leasing would not prevent surface disturbance and visual intrusions associated with geothermal exploration and development. A no surface occupancy stipulation would accomplish the same objectives for public lands, but would force development onto adjacent private lands, which would also degrade open space values in the urban interface area.

Withdrawal, a more restrictive option for mineral leasing, was also considered but eliminated from detailed analysis because a land use decision to close would accomplish the same objectives, is within the discretionary authority of the State Director, and would provide more flexibility for future

plan amendments should circumstances change.

- An analysis of the physical, biological, social and economic effects of implementing the alternatives was conducted.
- Preferred Alternative/Proposed Plan Amendment Selection - Based on the joint BLM/Carson City planning process and analysis of effects, the preferred alternative/proposed plan amendment was selected.
- The final plan amendment was selected following the Nevada Governor's consistency review.
- 9. Urban interface land management under the plan amendment will be periodically monitored and evaluated to determine the effectiveness of the decisions. The objective is to determine whether or not implementation of management prescriptions is achieving the desired results. Information obtained through the evaluation process will be used to adjust management of urban interface lands.

### CONFORMANCE WITH PUBLIC LAND USE PLANS

If adopted, the provisions of the plan amendment will be in conformance to the Walker Resource Management Plan (RMP). The amendment would affect decisions from the Reno Management Framework Plan that were incorporated by reference into the Walker RMP. This includes Decision One for land disposals, Decision Six for land exchanges, Decision Seven for mineral leasing, Decision Eight for mineral materials and Decision Forty-One for historic trails.

### RELATIONSHIP TO STATUTES, REGULATIONS OR OTHER PLANS

This amendment is directly related to and was developed jointly with the 1996 Carson City Master Plan Update.

This amendment supports the provisions of BLM Washington Office Instruction Memorandum 96-171, which encourages continued leadership and innovation in collaborative efforts with local communities.

This amendment is consistent with the objectives of BLM Memorandum of Understanding WO-480-9605 between the BLM, the Forest Service, and the National Association of Counties. The memorandum calls for coordination among federal and local land management plans.

This amendment was prepared pursuant to Section 202 of the Federal Land Policy and Management Act, which directs the Secretary of the Interior to develop land use plans consistent with State and local plans to the maximum extent consistent with federal law.

This amendment is also related to the proposed Pine Nut Mountains Plan Amendment. That amendment will include management prescriptions for motorized vehicle use and woodland management for those lands within the urban interface east of the Carson River.

This amendment is tiered to the Walker RMP/EIS which includes a comprehensive analysis of the affected environment.

Mineral inventories used to develop this alternative were prepared in accordance with BLM Manual 3031.

Disposal determinations in the plan amendment are related to the Taylor Grazing Act, section 1, or Executive Order 6910 which withdrew lands from disposal pending a determination the land use has more value for uses other than grazing or the production of forage crops. This amendment process has resulted in that determination since potential residential, recreation and public purposes would have a greater value than grazing or forage crops.

### PROPOSED ACTION AND ALTERNATIVES

### INTRODUCTION

This section presents the proposed action and a continuation of present management alternative for the management of public land in the urban interface area of Carson City.

### PROPOSED ACTION

The objective of the proposed action is to manage public lands in the Carson City urban interface to be consistent with the Carson City Master Plan and to provide for limited community expansion while maximizing open space values. The proposed action consists of the following elements:

- Designate 15,690 acres for retention in public ownership under the administration of the Bureau of Land Management (BLM) (Map 2).
- Designate 2,049 acres for potential disposal to State and local government through the Recreation and Public Purposes Act.
- Designate 153 acres for potential disposal through exchange for other lands in Carson City.

- Disposals along the V&T railroad corridor would be limited to those that fully protect the corridors historic and scenic values.
- Withdraw 17,892 acres from the operation of the locatable mining laws and close these lands to mineral exploration and leasing to protect open space and other public land values. These are discretionary actions.
- Lands retained in public ownership would be managed to protect open space, visual, recreation, watershed, and wildlife resources.
   Protection of these resources would be given priority over other land uses.
- Management of mineral materials in the planning area would be determined through a joint aggregate resources plan to be developed with Carson City.

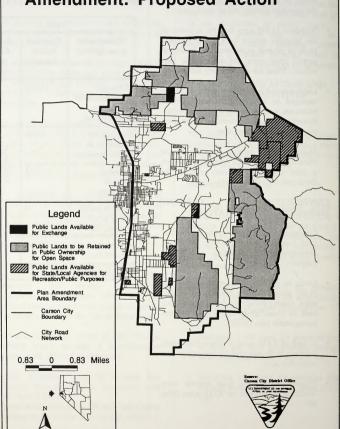
### CONTINUATION OF CURRENT MANAGEMENT ALTERNATIVE

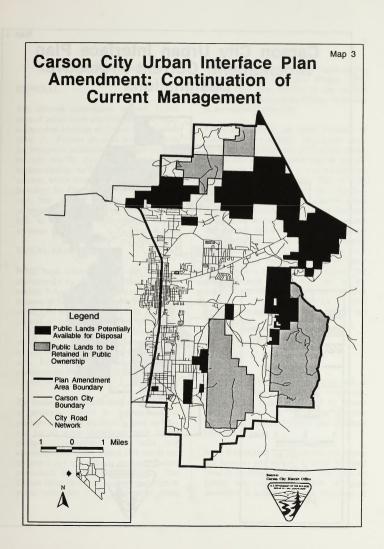
- Continue providing 6463 acres for disposal from federal public ownership for private development or recreation and public purposes (Map 3).
- Lands to be retained in public ownership (8,999 acres) would be available for mineral entry, major right-of-way facilities and other uses as identified in the Walker resource management plan (RMP).
- A total of 2,430 acres at Prison Hill would continue to be managed for open space and recreation uses.
- Current segregations from mineral entry would be maintained on 3,711 acres (Map 4).

Table One summarizes management prescriptions by alternative.

Table 1.					
Management prescriptions	Proposed Action (acres)	Continue Current Mgmt. (Acres)			
Protective management for open space, recreation etc.	15,690	2,430			
Disposal for recreation & public purposes	2,049	1			
Disposal through exchange	153	6,4631			
Mineral entry/ utility devel- opment, etc.	0	8,999			
Closed to mineral entry	17,892	3,711			
1. Includes direct	sales.				

## Carson City Urban Interface Plan Amendment: Proposed Action





## Map 4 Carson City Urban Interface Plan Amendment: Current Protective **Designations** Legend Public Lands Subject to Mineral Entry Public Lands Protected From Mineral Entry Prison Hill Recreation Lands Plan Amendment Area Boundary Carson City Boundary City Road Network 1 Miles

### AFFECTED ENVIRONMENT

### GENERAL

The affected environment includes 17,892 acres of public lands administered by the BLM in the urban interface of Carson City, Nevada (Map 1). Primary physical features include the Brunswick substation area, which includes the City landfill, shooting range and model airplane facility; the Duck Hill/Virginia Range uplands, which form the northern open space boundary for Carson City; the Pinyon Hills area, tree covered uplands that form the eastern boundary of the urban area; and Prison Hill, an open space and recreation area in southeast Carson City.

### VISUAL RESOURCES

Public lands administered by the BLM are characterized by desert mountain, hill, and canyon features with high visual sensitivity because of their proximity and exposure to the urban area and the public. The mountain features of public land in and around Carson City provide a pleasing visual backdrop to the urban area. Important landscape features include the exposed ridgelines near the urban area, Prison Hill, a more diverse vegetative pattern on the Pinyon Hills to the east, and the Carson River.

The landscape of uplands north of Carson City is primarily natural in appearance, but management under the existing land use plan has led to some disturbance from buried gaslines, powerlines, water tanks, and communication sites. Prison Hill stands out because it is a undeveloped landscape feature surrounded by urban development. The Carson River landscape is rated very high in scenic value due to the presence of water,

cottonwood trees, and the steep eroded canyon landscape below Deer Run Bridge. The Pinyon Hills areas provides a tree covered foreground for views of the Pinenut Mountains to the east of Carson City.

Public sensitivity to the visual resources in Carson City is very high. Most public lands are in the foreground view of 45,000 residents. and 45,000 tourist and local vehicles per day on Highway 50 and 395. A Visual Preference Survey conducted by Carson City in 1994 confirmed that public lands are important visual elements of the City. Scenes which highlighted the mountains and other dominant elements of the natural environment scored very positive with local citizens. The Carson River landscape scored high as a pleasing visual element of the City. Should the V&T railroad become operational along the lower Carson River a high volume of regional and national tourist traffic will add to the importance of this river landscape including nublic lands within the foreground/middleground view from the railroad grade.

### NATURAL RESOURCES

### Vegetation

Vegetation is characterized by shrubs such as big and low sagebrush, antelope bitterbrush, and Anderson peach brush; and by grasses such as bottlebrush squirreltail, Thurber needlegrass, Indian ricegrass and Sandberg bluegrass.

In the Pinyon Hills the pinyon tree and juniper tree come to prominence. In small localized areas of the Pinyon Hills these trees grow so thickly that very little shrub or grass understory is able to exist, but over most of

the area the trees grow in a more scattered distribution and here the trees share the land with the usual component of big sagebrush, antelope bitterbrush, and the common grasses of bottlebrush squirreltail and Thurber needlegrass.

In early spring the wildflowers begin to show. with prickly phlox being the first flower seen on the loamy or clavey soils. During a wet spring, especially if preceded by several years of drought, a surprising variety of flowering plants come forth including monkey flower. bluelips, globemallow. On areas which have burned in the recent past, such as parts of Duck Hill or the area northeast of the golf course, a considerable quantity of annual weeds such as tumble mustard. Russian thistle. and cheatgrass form the bulk of the plant community. The establishment of these species, particularly flammable cheatgrass, can increase the potential for future fires. Where successful fire rehabilitation occurs, less flammable species have become established.

### Wildlife

Public land within the urban interface provides habitat for a wide variety of wildlife species including, but not limited to: mule deer, mountain lions, bobcats, covotes, gray fox, California and mountain quail, mourning dove, chukars, muskrats, raccoons, striped and spotted skunks, black-tailed jackrabbits, various species of hawks, owls and eagles and a host of small mammals, birds, reptiles, and amphibians. Though there are a few resident mule deer that utilize portions of the area on a year round basis (i.e. river corridor), the majority of the area serves as winter range for deer moving down from adjacent higher elevations and migrants from the Carson River and Loyalton-Truckee deer herds.

### Threatened and Endangered Species

Except for the bald eagle, no threatened or endangered wildlife species have been identified in the urban interface area. The bald eagle visits the Carson River area from November through April. Eagles are not currently nesting nor have they taken up year round residency in this area. They have been observed soaring over the Carson River during the winter months.

The potential does exist for two sensitive species to occur on public lands within the urban interface area. They are the Carson City wood nymph butterfly, and the Carson wandering skipper butterfly, both of which utilize riparian habitats to complete their life cycle process. The wandering skipper is known to select saltgrass areas in the Hot Springs area of Carson City.

### Wild Horses

About four percent of the Northern Pine Nut Herd Area overlaps into the Pinyon Hills portion of the urban interface. Approximately 175 horses comprise the Pine Nut herd, with the Carson City urban interface supplying forage for about eight of these horses. Several of these wild horses can occasionally be seen north of Pinyon Hills subdivision, between the hills and the river.

Horses which sometimes graze the hills behind the golf course or in Eagle Valley are animals which have been turned loose in more recent times by people in the Virginia Highlands. They are not horses managed by the BLM under the Wild Horse and Burro Act of 1971. Although Storey County is the epicenter of this group of horses, these animals, are becoming increasingly numerous in the area on

the northeast portion of the urban interface.

### CULTURAL RESOURCES

### Historic

Carson City was a well established urban area in the 1800s with extensive ties to the Comstock and other towns. Consequently, there are many historic sites located on public lands within the urban interface.

Recorded historic sites encompass segments of major transportation routes such as the V & T Railroad grade and the Carson River Route of the California Trail as well as other transportation/communication corridors between Carson City and other towns. Several toll stations have been recorded from early maps. Mill sites are located along the river by the V & T Railroad grade. Most of these sites are on private lands. Eureka Station, an ore chute for the Eureka Mill and Railroad, is located on public lands near the Carson River on the V & T Railroad grade.

The northwestern edge of the Pine Nut Mountain Range contains historic mining and wood cutting sites. One lime kiln has also been recorded within the range in this vicinity. The Virginia City Pipeline and Flume, located on Duck Hill, is also within the planning area. Water was transported from Marlette Lake and Hobart Creek Reservoir to Virginia City. The pipeline was considered a great engineering accomplishment at the time of its construction.

Based on the historic record, sites on public lands within the planning area could include mining, milling or other industrial, woodcutting, transportation corridors and associated features such as toll stations, communication/utility corridors (including telegraph, pipelines and ditches), agricultural/ranching sites, historic buildings and just about anything else a growing town would generate.

#### Prehistoric

This area has been occupied for thousands of vears. Long term habitation areas were located on high ground above rivers and The probability is high for the springs. existence of sites along the river or at springs in those areas that have not been disturbed by modern development. Since pine nuts are an important food source to Native Americans. pine nut camps may occur in those areas containing pinyon. Other sites which may occur within the planning area are quarry sites, knapping stations and other single task oriented sites, rock alignments/rock rings (possibly habitation). hunting blinds. petroglyphs and burials.

### GEOLOGY AND MINERALS

### Geologic Setting

Carson City is situated in Eagle Valley located in west-central Nevada at the western extent of the Basin and Range physiographic province. The valley is surrounded by the Carson Range to the west, the Virginia Range to the north, the Pine Nut Mountains to the east, and Prison Hill to the southeast.

The southern slope of the Virginia Range consists of Triassic and Jurassic metasedimentary and metavolcanic rocks that have been intruded and metamorphosed by Cretaceous granodiorite. The Pine Nut Mountain Range is a complex, west-tilted, fault-bound mountain block. The northern end of the range consists of roof pendants of

Triassic and Jurassic metamorphic rocks overlying Cretaceous granitic intrusions. These include metavolcanics that consist of andesitic breecias, tuffs and flows, basalt, and rhyolite that have undergone low to medium grade metamorphism. The metasediments, less abundant in outcrop than the metavolcanics, consist mainly of metamorphosed shale, tuffaceous siltstone, and limestone and lenses of metamorphosed sandstone, graywacke, dolomite, gypsum, and chert.

### Mineral Deposits and Production History

Hard-rock mining activity in the Carson City area dates back to 1859 when quartz veins were discovered in the foothills north and west of the city. The Premier and Voltaire mines located west of the city were actively explored during this time, but no production is recorded for the mines. In 1876 work was done at the North Carson Mine Mineralization at this mine is contained in quartz veins and consists of chalcopyrite, galena, and possibly silverantimony sulfides. The mine operated for a short time during this period. In 1925, small amounts of copper-lead-silver ore were sold from the mine. These mines have not experienced significant activity since. Several small prospecting pits exist north of the city. involve copper and mineralization near the contact zone between the intrusive granodiorite and the limy metasedimentary rocks. The northeastern area of the subject land include prospects which explore scheelite-bearing skarn zones along intrusive contacts in that area. Currently, there are no active mining operations or mills within the subject land.

A building stone quarry existed north of Prison Hill and supplied much of the local construction material at the turn of the century. A few material pits were mined for decomposed granite along the foothills north and west of the city. However, these pits are no longer in existence. Near the Voltaire mine, graphite was produced from the Carson Black Lead mine from 1903 to 1947. Volcanic cinder is currently mined from private land in the southern Virginia Range near the city.

### Mineral Potential

According to the Carson City District mineral resource inventory, prepared by the Newada Bureau of Mines and Geology (Tingley, 1990), the subject lands have low to moderate potential for the occurrence of metallic minerals and geothermal resources and high potential for the occurrence of several industrial minerals.

Regarding locatable minerals, about 2000 acres of public land at the eastern limits of the valley fall within an area assigned a low to moderate potential for the occurrence of gold, silver, copper, iron, and tungsten, and a low rating for the occurrence of manganese. Another 2700 acres in the northern portion of the city have a moderate potential for the occurrence of gold and silver(Map 5). The remaining unassigned areas were not classified due to lack of data.

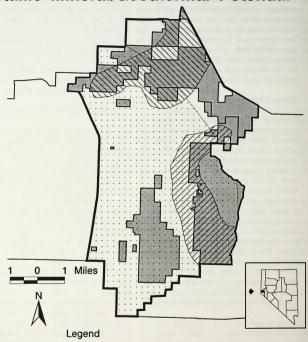
The potential for the occurrence of volcanic cinder is high for approximately 960 acres of BLM managed land, at the northern portion of the subject lands. The potential for the occurrence of gypsum is high on some segments of the subject land at the northeastern portion - about 2720 acres of public land. Dimension building stone is known to occur at the north end of Prison Hill including 80 acres public land (Map 6).

For leasable minerals, about 8000 acres of public land lie within an area assigned a moderate potential rating for geothermal resources (Map 5). No potential for other leasable minerals, including oil and gas, has been determined. No mineral leases occur on these public lands. No material permits exist on these public lands. Interest has been shown for the development of the mineral material contained upon these lands.

### Mining Claims

Currently, 11 unpatented mining claims are properly recorded. The majority of these are situated at the eastern edge of the subject land with a few at the northern end. Currently, work is being performed at three different sites involving unpatented mining claims. One site, north of the city, has experienced sporadic minor excavation. Mill site claims near the airport are utilized for sorting and storage of volcanic cinder which is mined from patented claims located at the northern portion of the subject land. A custom mill operation exists at a site located along the east side of the Carson River. The unpatented claim involved with this site have been deemed invalid, but this decision is under appeal. Claimants of other unpatented claims have not filed notification with BLM, so the degree of work, if any, performed at these sites is uncertain.

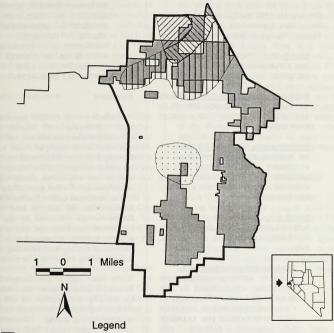
# Carson City Urban Interface Map 5 Plan Amendment Metallic Mineral/Geothermal Potential



- Public Lands Administered by the Bureau of Land Management
- Planning Area Boundary
- Carson City Boundary
- Moderate Geothermal Potential
  - Moderate Gold and Silver Potential
  - Low to Moderate Gold, Silver, Manganese and Copper Potential, Moderate Iron and Tungsten Potential



### Carson City Urban Interface Plan Amendment Industrial Mineral Potential



- Public Lands Administered by the Bureau of Land Management
- Planning Area Boundary
- Carson City Boundary
- High Building Stone Potential
- High Cinder/Gypsum Potential
- High Cinder Potential
- High Gypsum Potential



### LAND USE

### Land Use Plans

On July 18, 1996 the Carson City Board of Supervisors approved the 1996 Master Plan Update. The update included these provisions:

- Goal 7: PLAN FOR THE DEVELOPMENT OF AND IMPLEMENT ADEQUATE COMMUNITY FACILITIES AND SERVICES.
- Implementation Strategy 7.7.1: ADOPT AS PART OF THE LAND USE PLAN APPROPRIATE SITING OF PUBLIC FACILITIES.
- Implementation Strategy 7.1.2: CONDUCT AN AGGREGATE RESOURCE STUDY TO DETERMINE WHERE SOURCES CAN BE OBTAINED IN THE FUTURE WHILE ENSURING PROPER MITIGATION MEASURES ARE REQUIRED.
- <u>Policy</u> 8.9: ENCOURAGE THE USE OF PUBLIC LANDS AS OPEN SPACE, VISUAL RESOURCE, RECREATION, AND PUBLIC USES.
- Implementation Strategy 8.9.1:
  CURRENT DISPOSAL DESIGNATIONS
  FOR LANDS ADMINISTERED BY THE
  BUREAU OF LAND MANAGEMENT IN
  CARSON CITY SHOULD BE REPLACED
  WITH DESIGNATIONS FOR TRANSFER
  OF SPECIFIC PARCELS FOR
  RECREATION AND PUBLIC PURPOSES
  AND EXCHANGE FOR OTHER LANDS
  WITHIN THE CARSON CITY LIMITS.
- Implementation Strategy 8.9.2:
   REMAINING LANDS SHOULD CONTINUE
  IN PUBLIC OWNERSHIP UNDER BLM

ADMINISTRATION. CURRENT DESIGNATIONS FOR DISPOSAL UNDER THE VARIOUS PUBLIC LAND LAWS INCLUDING THE U.S. MINING LAWS RE REPLACED SHOULD WITH PROTECTIVE DESIGNATIONS TO ENSURE CONTINUED PUBLIC OWNERSHIP AND MANAGEMENT AS OPEN SPACE TO PROTECT VISUAL. RECREATIONAL AND OTHER RENEWARI E RESOURCES

### Recreation

Public lands provide excellent opportunities for passive recreation uses because of their undeveloped character and easy access from residential areas, city parks and schools. Popular activities include walking, jogging, horseback riding, mountain biking, viewing wildlife and wild horses, nature study, and motorcycle and 4-wheel drive riding on back country roads and trails. The majority of use is short term, day use, by local residents. Recent surveys conducted by the Nevada Division of State Parks confirm that the most popular outdoor recreation activities for residents in this region are relaxing outdoors, walking, hiking and driving for pleasure.

Public lands east of the Carson River in Brunswick Canyon and on the north side of Carson City are popular for off-highway vehicle exploration, horseback riding and mountain biking activity. Dramatic scenic views of Eagle Valley, and a network of existing roads and trails that connect to Washoe Lake State Park, Centennial Park, Virginia City Historic District and the Pine Nut Mountains contribute to this areas popularity.

The Prison Hill Recreation Area receives an estimated 7,000 visits annually from local

residents and is the site of school cross country running competitions. Lands along the Carson River have a high value for outdoor recreation because of the presence of water and cottonwood trees. Popular activities include camping, hiking, fishing, canoeing, and nature study. Public lands on the river have been identified in the Carson City Trails and Carson River Land Use Plan elements as critical to the urban trail system and for public recreation access.

### Realty Management

There are 17,892 acres of public lands managed by the BLM within the urban interface boundaries of Carson City. Many of these lands are designated for specific uses, such as Prison Hill with its high recreation values. Other lands have been leased to the City under the authority of the Recreation and Public Purposes Act. These include the City's landfill site, shooting range, and parts of its golf course complex. Most of the Carson City golf course, Centennial Park ball fields, the nearby trap shooting range, and some parks and school sites, have been patented to the City under the same Act.

A number of large power transmission lines crossing federal lands converge at the Brunswick substation, south of highway U.S. 50, near the Lyon County boundary. One of these lines continues on to Incline Village at Lake Tahoe. One natural gas transmission line, and another proposed, cross through the northern part of the City, also on their way to Lake Tahoe. Numerous rights-of-way for phone lines, electric lines, and water and gas pipelines have been authorized across federal lands to serve residential, commercial, and light industrial growth in the City.

### Livestock Grazing

The urban interface includes all or portions of five grazing allotments. Of these, Duck Hill and Jumbo are grazed by both sheep and cattle during spring or summer, but the portions of the allotments within Carson City are very seldom grazed. Carson Plain is a sheep allotment and a band of sheep will spend a short period of time within the Carson City portion of the allotment nearly every year. usually in April. The Sand Canvon allotment has no regular livestock grazing, but may be grazed for a short time by sheep on a sporadic basis, usually in the winter. The small portion of the Buckeye allotment within the urban interface has not been grazed for many years but could potentially be grazed by either sheep or cattle during the wintertime.

### SOCIAL ECONOMIC CONDITIONS

Carson City has a population of 45,000. The city has been growing at a rate of about two percent per year over the last 20 years. This extended period of growth has created concerns about preservation of open space. The City's 1995 visual preference survey revealed a strong preference for preservation of remaining open space land. A typical comment was:

"Lets try and retain some of the openness we have left."

Carson City is the capital of the State of Nevada and its economy is primarily reliant on State government for its economic base. State and local government contribute 22 percent of the City's personal income (1994). The City have also been successful in diversifying its economy through manufacturing (10 percent of income) and retail trade (8 percent of income).

The gaming/tourism/services sector is also significant (15 percent of income). Mining plays a very small role in the City's economy, representing less than one tenth of one percent of personal income (Harris, 1996).

Public lands administered by the BLM are not a large factor in the City's economy. Their primary contribution is to provide recreation and open space amenities. These are reflected in real estate values, which are higher for properties with views of open space and for properties adjacent to open space public lands (Leck, 1996).

### ENVIRONMENTAL CONSEQUENCES

### PROPOSED ACTION

### Visual Resources

Continued public ownership of high value lands adjacent to the urban area, at Prison Hill and along the Carson River would reduce the potential for adverse visual impacts. These lands would remain relatively undeveloped and free of new aesthetically undesirable sights and influence.

Steep exposed lands at Prison Hill, and in the immediate foreground view of the community would be protected from significant surface disturbing and development activities such as mining, geothermal development, and new major rights-of-way.

Property value of residential areas will be protected and enhanced by maintenance of adjacent open space and visual quality. Quality of life values recognized by the public as important in the Carson City Visual

Preference Survey would be enhanced by this alternative which provides for the maintenance of the greatest acreage of undeveloped public land for open space. This alternative provides the most protection of the overall visual setting of Carson City.

#### Natural Resources

Vegetation. Under the proposed action 15,960 acres of land would be maintained in public ownership and managed for open space values. This would reduce the potential for disturbance and removal of the native vegetation. The proposed mineral withdrawal on an additional 14,181 acres of public land in the planning area would reduce the amount and degree of possible disturbance to the native vegetative resource on all land retained in public ownership.

Wildlife. The 15,960 acres of public lands identified for retention, in combination with the additional 14.181 acres of mineral withdrawals ensures the continued presence of suitable habitat along the urban interface. This habitat will not only be available for wintering deer, and a host of other wildlife species, it will serve as a buffer between the community and more remote habitats. Retention of riparian habitat along the river corridor may be the most significant aspect of this proposal. It ensures that this productive habitat will remain available to the wide variety of wildlife species dependent upon it. The attributes of water, vegetative and structural diversity, and the moderated environment provided by this combination of factors, makes the riparian corridor the most valuable wildlife habitat in the urban area.

Potential disposal of up to 2,202 acres of public lands as identified in this proposal is not expected to significantly impact wildlife.

Threatened and Endangered Species.

Retention of a larger percentage of public lands within the urban area reduces the likelihood that if important habitats do exist for listed or sensitive species they will be less likely to be fragmented or isolated by disposal actions.

Relative to the disposal of lands under this alternative, an actual determination of the presence, absence or degree of impact to species of special concern will be accomplished at the time individual parcels enter the disposal process. Existing laws and BLM policy prevent the BLM from disposing of lands which significantly impact federally listed species or jeopardize the welfare of sensitive species. Since this proposal does not actually determine disposal eligibility, in and of itself, it does not negatively impact threatened, endangered or sensitive species.

Wild Horses. The 30 acres of land proposed for disposal within the Pinyon Hills area, although slightly reducing the land area available for the Pine Nut horses, would be negligible. The horse population would require no adjustment solely on the basis of forage base removed, although the increased human population growth may eventually force a reduction in the urban interface portion of the herd regardless of the alternative selected.

### Cultural Resources

This alternative reduces the need for inventory and data recovery by decreasing

the acreage identified for disposal and limiting disturbances from construction in rights-of-way and mining development. The potential for destruction of cultural resource sites is less from these particular actions.

All lands that enter the disposal process, be it sale/exchange or R & PP, are subject to the standard procedures for compliance with the Section 106 process. A cultural resource site passing out of federal ownership is considered to be affected. This alternative would ensure protection of the cultural resources along the V&T Railroad grade if it is transferred to State or local agencies.

Under the proposed action, the BLM will manage public lands for open space, visual, recreation, watershed, and wildlife resources. Specific actions taken under these management guidelines may have the ability to affect cultural resources. All federal undertakings are subject to the requirements of Section 106. Inventory, evaluation of sites and determination of impacts from specific actions are completed at the time following standard compliance procedures.

### Geology and Minerals

The impact to mineral resources from the proposed action would be the withdrawal of 17,892 acres from mineral entry under the authority of the Federal Land Management and Policy Act. Of the 17,892 acres, 3,711 acres are currently segregated or otherwise unavailable for operations under the mining law. These restrictions on mining are the result of classification under the Classification and Multiple Use Act or the Recreation and Public Purpose Act. On the remaining 14,181 acres, potential future development of locatable and leasable

mineral resources would be foregone, subject to valid existing rights.

Table 2 identifies closures by mineral potential.

Table 2 Mineral Withdrawals by Potential				
Mineral Potential	Commodity	Acres		
High	Cinder	960		
High	Gypsum	2680		
High	Stone	80		
Low/Mod Moderate Low Moderate	Au Ag Cu iron manganese tungsten	2060		
Moderate	Au Ag	2680		
Moderate	geothermal	8410		

Development of valid existing mining claims and salable minerals may be constrained, but not precluded as a result of proposed management prescriptions for the protection of open space for Carson City. The issues associated with saleable minerals will be addressed in a joint aggregate resources plan to be developed cooperatively with Carson City.

### Land Use

Land Use Plans. The proposed action would be consistent with the Carson City Master Plan and would help to achieve the City's goals of preserving open space and providing for adequate community facilities. The proposed action's impact on the existing Walker Resource Management Plan would be to enhance the protection of open space resources.

Recreation. The proposed action would maintain the majority of public lands open and readily accessible to the public for recreation activities including hiking, exploring, walking, horseback riding, and biking. Development activities that could restrict public access and impact the natural recreation setting, such as mining and major rights-of-way, would be limited on lands identified for retention or public purposes.

High recreation value lands along the Carson River would remain accessible for water oriented recreation activity. Public lands adjacent to Centennial Park, at Duck Hill and along the Carson River identified for the Carson City Eagle Valley and Carson River Trails would be retained in public ownership for trail development and use. The primary recreation access routes to the Pinenut Mountains in the Brunswick and Sand Canyon areas would be protected from intrusive and right-of-way development. Opportunities for hiking, horseback riding, mountain biking and OHV use on Prison Hill would be further protected by excluding surface and noise disturbances associated with mining and geothermal development.

Realty Management. The proposed action designates 15,690 acres of public lands for retention in public ownership, 2049 acres for potential transfer to State and local government under the authority of the Recreation & Public Purpose Act and 153 acres for potential exchange for other lands within Carson City.

One of the elements of the proposed action is to manage those lands retained in public ownership for the protection of open space, visual, watershed, and wildlife resources. Although rights-of-way could continue to be permitted on these lands, those that seriously conflict with management for open space, visual resources, watershed, or wildlife resources would not be approved. In addition, rights-of-way that would be approved would likely include more measures to protect those resources.

Livestock. Under the proposed action approximately 10 AUMs of sheep grazing within the Carson Plain allotment could eventually be lost as the land is transferred to other uses. A negligible amount of potential sheep grazing within the Sand Canyon allotment may also be lost through future land disposal actions.

#### Social Economic Conditions

The proposed action would benefit social and economic conditions in Carson City by helping maintain open spaces that enhance the City's quality of life and its property values.

These benefits could be partially offset by potential increases in the cost of future rights-of-way and mineral developments and by foregoing the low potential for future increases in mining related income.

Since the protective designations would enhance open space and recreation values for all Carson City residents, regardless of income or race, there would be no adverse environmental justice concerns.

### CONTINUATION OF CURRENT MANAGEMENT ALTERNATIVE

### Visual Resources

This alternative would have adverse impacts on scenic quality along the Carson River and the Centennial Park area, should public lands be disposed of and developed.

Adverse impacts would occur to the visual quality and open space on hillside lands north and east of the urban area. These lands are highly vulnerable to adverse impacts as they are directly sloped and exposed towards the community and developed residential areas. Due to current protective designations, the visual and recreation values of Prison Hill would not be lost.

There would be little impact from disposal and development of lands to the east between Highway 50 and the river where these lands currently have been impacted from existing developments such as the dump, water tank, access road, etc.

The visual quality of lands adjacent to Brunswick and Sand Canvons could be degraded by mineral and right-of-way activities These areas are the primary recreation access to the Pinenut Mountains for many Carson City residents. Reasonably foreseeable small scale mineral exploration could degrade visual quality in areas currently open to the operation of the mining laws. This would include disturbance from trenching and operations. Geothermal building exploration would temporarily degrade visual quality due to the height of structures and associated road building disturbance. In the unlikely event of geothermal development the impacts to visual resources would be severe due to extensive roads, pipeline and power plant development. Due to difficult vegetation rehabilitation conditions, visual disturbances would only be partially mitigated in the long term.

Development of lands within the foreground/middleground view of the V&T railroad grade and the lower Carson River would result in degradation of high value unique scenic resources.

### Natural Resources

Vegetation. As the 6,463 acres identified as potentially suitable for disposal are removed from public ownership and management, the vegetative resources on these lands will almost certainly be changed from the present native sagebrush-grassland communities to something far less natural (pavement, buildings, lawns).

The vegetative resource on a further 8,999 acres of land remaining in federal public ownership would be subject to some modification and loss during mining exploration, rights-of-way clearing, etc.

Wildlife. Continuation of current management will ultimately result in a decline in the amount of available wildlife habitat in the urban interface area. The buffering capabilities that these lands provide between the community and the more remote areas will be diminished. The disposal of public lands along the river or riparian corridor poses the greatest threat of habitat loss for wildlife. Though this type of habitat is relatively small in acreage, it is by far the most productive wildlife habitat within the urban area. Development in or adjacent to these lands would greatly reduce its value for numerous species of wildlife, but migratory bird species would likely suffer the most significant impacts.

Loss of the uplands near Duck Hill, the Virginia Range and adjacent to Brunswick Canyon would further reduce already limited wintering areas for mule deer. Though current management of these areas has resulted in disturbance, during severe winters with above average snow levels, these areas offer some of the lowest elevation foraging and travel routes for the wintering deer.

Threatened and Endangered Species. The bald eagle is the only federally listed species known to periodically utilize habitat in the subject area. The type of riparian habitat required by the two sensitive species is extremely limited or nonexistent on the public lands identified for disposal. determination of the presence, absence or degree of impact to any of these species, or other species of special concern will be accomplished at the time individual parcels enter the disposal process. Existing laws and BLM policy prevents the disposal of lands which significantly impact federally listed species or jeopardize the welfare of sensitive species. Since this proposal does not actually determine disposal eligibility, in and of itself, it does not impact threatened, endangered or sensitive species.

Wild Horses. The lands identified for probable disposal from federal public ownership include the portion of the Pine Nut Herd Area which supports about eight wild horses. As portions of this land are transferred to other uses, this forage base will be reduced. The Brunswick and Sand Canyons area horses make up approximately five percent of the total Pine Nut Herd.

#### Cultural Resources

Current management identifies 6,463 acres as available for disposal from federal ownership. The land identified for disposal near the river has high potential for both prehistoric and historic resources. One of the parcels contains a small segment of the V&T Railroad grade and the Eureka Station. In compliance with Section 106 of the National Historic Preservation Act, the BLM must ensure that its actions do not inadvertently harm properties which are eligible for the National Register. Accordingly, a cultural resources inventory must be completed as parcels enter the disposal process. Mitigation of eligible sites identified by the inventory must occur. If these sites are eligible solely for the information they contain, they can be mitigated through data recovery to a "No Adverse Effect" determination. In the case of an "Adverse Effect" to an eligible property, the BLM may or may not decide to deny the disposal. Adversely affected sites are generally associated with important historical events or significant persons, or are characteristic of a particular type of construction, style, period of time, etc. If the BLM decides to continue with the action, it must seek ways to mitigate that adverse effect.

Both inventory and data recovery add to the general data base for cultural resources. However, sites passing out of federal ownership in all likelihood will be destroyed. Due to budget and personnel constraints, almost all inventory and subsequent data recovery are project driven through the requirements of Section 106.

There are 3,711 acres withdrawn from mineral entry. Withdrawal from mineral entry precludes individuals from staking *new* claims

which may reduce the potential for degradation/destruction of cultural resource sites within these protected areas. However, it is important to note that the withdrawal does not provide any protection to cultural resource sites located on claims with valid existing rights.

There are 15,462 acres of public land which are open major right-of way facilities, etc. Federal undertakings are subject to Section 106 of the National Historic Preservation Act. As in land disposals, the same effects may occur.

### Geology and Minerals

The potential for disposal of public land under the authority of the mining laws would continue on 14,181 acres of public land. Current and potential future mining claims on public lands could be developed for mining operations.

Reasonably foreseeable development for locatable minerals would include continued small scale exploration, including surface disturbance from trenching and road building activities. As the population and land values of Carson City increase, the potential for mining claim occupancy trespass will increase. It is unlikely that any producing mine will be developed.

Reasonably foresceable development for leasable minerals would include geophysical surveys and the drilling of several temperature gradient wells. It is unlikely that a wildcat geothermal production well would be drilled. Temperature gradient wells could involve temporary road construction, disturbance of a 100 square foot ares, a 50' drill rig, an office

trailer, mud pits water tanks and pipe storage for one to several weeks (Figure 1). During operations, drill rigs will be visible from many vantage points in the urban area.

In the unlikely event that a discovery of an economic geothermal resource occurs, the attendant development would include the drilling of wells, location of trailer houses, water tanks, drill rig sub-structures, construction of sump pits, and cooling towers (Figure 2); as well as construction of roads, pipelines, powerlines and the siting and operation of a power plant.

### Land Use

Land Use Plans. This alternative would be in conflict with the Carson City Master Plan since it would not provide the level of open space preservation identified in the plan. It would, however, provide sufficient land available for future public facilities.

Recreation. Disposal and development of public lands along the Carson River and lands to the north of the community around Centennial Park and Duck Hill would not be consistent with Carson River and Trails elements of the Carson City Master Plan. Development would result in a loss of access to the river and would restrict recreation trail opportunities. Mining or major right-of-way development on lands near Centennial Park and Duck Hill would have a negative impact on the proposed Eagle Valley Trail system planned for around the community.

Reasonably foreseeable small scale mineral exploration would degrade the quality or recreation opportunities on lands currently open to the mining laws. This would be due to surface and noise disturbance from trenching and road building operations which would change the natural setting and disturb open space resources upon which passive recreation values are based. The public would be restricted from using lands developed for mining for the life of the mining operation. In the unlikely event of geothermal power development, recreation opportunities would be degraded due to surface and visual disturbance from pipelines, roads, and a power plant.

Realty Management. Under this alternative, land disposals for subdivision, industrial, recreation, and public purposes could potentially occur on 6,463 acres of land within the Carson City urban interface. Disposal for mining development could occur on 14,181 acres. Rights-of-way for utility development could continue on 15,462 acres, with restrictions for open space and recreation uses on 2,430 acres at Prison Hill.

Livestock. As the identified lands leave public ownership, the permitted livestock grazing within the affected allotments will decrease. Carson Plain allotment could loose approximately 30 AUMs (Animal-Unit-Months) of sheep grazing. Duck Hill could loose 100 AUMs of combined sheep and cattle grazing, with Jumbo and Buckeye allotments loosing negligible amounts of grazing. Although Sand Canyon grazing may be lost, there is no regularly permitted grazing in this allotment.

FIGURE 1
Typical Temperature Gradient
Well Layout

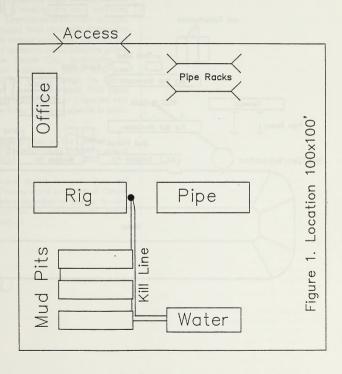
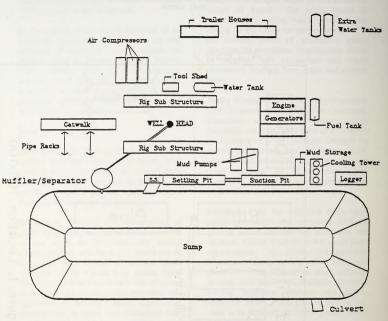


Figure 2
Typical Geothermal Exploration/Production
Well Layout



#### Social Economic Conditions

This alternative could jeopardize future social economic conditions in Carson City by providing for potential future development and degradation of existing open space and visual resources. Degradation of recreation and open space resources from reasonably foresceable small scale mineral exploration activities and geothermal operations would affect the quality of life in Carson City, particularly for homeowners adjacent to public lands near Duck Hill, the Virginia Range, the Carson River, and Pinyon Hills areas. This could decrease the market value of properties with open space views and those adjacent to public lands.

This alternative has a low potential for providing future increases in mining related income.

Since adverse impact to open space and recreation values would occur for all Carson City residents, regardless of income or race, there would be no environmental justice concerns affects.

### CONSULTATION AND COORDINATION

This amendment has been developed through a unique joint planning process with the City of Carson City. This process, the first of its kind in Nevada, included identifying planning boundaries ,conducting joint consultation and coordination efforts and pooling available resources to complete the plan. By pooling resources, savings to both city and federal governments were realized. The planning process has increased the efficiency of both Carson City and BLM land use decision making and further improved cooperative relations between the City and the BLM.

Public scoping was initiated with a Federal Register notice of intent to amend the plan (Vol. 60, No. 106, 6/2/95). Press releases were published by local newspapers. State of Nevada and Carson City public notice requirements were met, including published legal notices and posting of meeting notice in prominent locations. A series of 12 public meetings were held from June, 1995 through July, 1996 to refine the issues and the preferred alternative. These public meetings vielded a broad public consensus for retaining most of the public lands in the interface area in public ownership under the administration of the BLM. This consensus included managing these lands for their open space, visual, wildlife, watershed and recreation resources.

Consultation was conducted with the Washoe Tribe in conformance to the Native American Graves Protection and Repatriation Act and American Indian Religious Freedom Act and the Environmental Justice Executive Order. No Environmental Justice concerns were identified. The Washoe Tribal Chairman participated in the joint Carson City/BLM

planning workshops for this effort.

State Clearinghouse reviews were completed in September, 1996. The Division of State Lands stated that they "...support the proposed amendment and commend the BLM and Carson City on their cooperative planning efforts." The Division of Wildlife stated "we appreciate the efforts of the Carson City District to propose and assess the difficult issues of land classification affecting Carson City. The Division of Minerals has agreed with BLM's approach to the mineral withdrawal process. No other significant issues were raised and the Clearinghouse concluded that "...no inconsistencies with State or local plans, policies or programs have been determined."

### PREPARERS/REVIEWERS

Qualifications of Preparers/Reviewers					
Name	Responsibility	Office	Education	Experience	
David Loomis	Project Manager/Land Use Planning/Social Economics,	Carson City District	M.S. Land Use Planning B.A. Economics	18 years	
Mike Phillips	Management Review	Carson City District	B.S. Forestry/Range	27 years	
Brian Amme	Planning/NEPA Review	Nevada State Office	B.A. Anthropology	12 years	
Earl McKinney	Natural Resources/ Livestock Grazing	Carson City District	B.S. Range Mgmt.	21 years	
Tom Abbett	Recreation/Visual	Carson City District	B.A. Forestry /Recreation	26 years	
Dan Jacquet	Geology/Minerals	Carson City District	B.S. Geology	19 years	
Randy Trujillo	Wildlife	Carson City District	B.S. Wildlife Mgmt.	13 years	
Peggy Waski	Cultural Resources	Carson City District	B.A. Anthropology	11 years	
Ron Tauchen	Geology/Minerals	Carson City District	B.A. Geology	18 years	
John Pinzl	Realty Management	Carson City District	B.S. Forestry	26 years	
Carla James	Geology/Minerals	Carson City District	B.S. Geology	3 years	

### REFERENCES

Carson City, Visual Preference Survey. 1994.

Harris, Thomas, <u>Economic Development and Fiscal Issues for Carson City</u>. University of Nevada, Reno, 1996.

Leck, Dan (Carson City Realtor), Phone conversation, 8/13/96.

Tingley, Joseph, 1990. Mineral Resource Inventory. Carson City District Office, U.S. Bureau of Land Management.

U.S. Bureau of Mines, 1994. Minerals Yearbook Volume II.

U.S. Bureau of Mines, 1995. Mineral Commodity Summaries.

### DECISION RECORD/FINDING OF NO SIGNIFICANT IMPACT

### DECISION

The Carson City Urban Interface Plan Amendment is approved as proposed.

### RATIONALE

The plan amendment was developed jointly with the City of Carson City. It would protect the quality of life in Carson City by protecting the open space values of public lands. Although the plan amendment would potentially limit future mineral development, it would protect extremely valuable open space resources. This alternative provides the most protection of the overall visual setting of Carson City. It would implement the decisions and recommendations of the joint BLM/Carson City planning process and is fully consistent with the Federal Land Policy and Management Act and the BLM/Forest Service/National Association of Counties Memorandum of Understanding for cooperative federal/local land use decisionmaking.

### FINDING OF NO SIGNIFICANT IMPACT

While the plan amendment could potentially limit future mineral and other land development, implementation of the plan amendment would reduce the potential for future adverse impacts to the quality of life in Carson City. Protection of open space would result in minimizing adverse impacts to visual, watershed, recreation and wildlife resources on public lands in the Carson City urban interface. Therefore, the proposed amendment would have no significant impact and the preparation of an environmental impact statement is not necessary.

APPROVED:

State Director, Neva

10-11-96

Date

### Appendix Protest Procedures

This resource management plan amendment may be protested by any person who participated in the planning process and who has an interest which is or may be adversely affected by the approval of the plan amendment. A protest may raise only those issues which were submitted for the record during the planning process (see 43 Code of Federal Regulations 1610.5-2). Protests must be filed with:

Director (210)
Bureau of Land Management
Attention: Brenda Williams
1849 C Street, N. W.
Washington, D.C. 20240

All protests must be written and must be postmarked on or before the date identified in the cover letter and should contain the following information:

The name, mailing address, telephone number and interest of the person filing the protest.

A statement of the issue or issues being protested.

A statement of the part or parts of the document being protested.

A copy of all documents addressing the issue or issues previously submitted during the planning process by the protesting party, or an indication of the date the issue or issues were discussed for the records.

A short, concise statement explaining precisely why the Bureau of Land Management's Nevada State Director's decision is wrong.



DENVER OF SOLVER

HD 243 N3 C369 1996
U. S. Bureau of Land
Management Carpon City

HD 243 N3 C369 1996 U. S. Bureau of Land Management. Carson City Carson City urban interface plan amendment

> BLM LIBRARY RS 150A BLDG 50 DENVER FEDERAL CENTER P.O. BOX 25047 DENVER, CO 80225

